

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Jennifer L. Schmitke, Donghao Chen, Richard P. Batycky, David A. Edwards, and Jeffrey S. Hrkach

Application No.:

09/888,126

Group Art Unit:

Filed:

June 22, 2001

Examiner:

Confirmation No.:

Title:

PARTICLES FOR INHALATION HAVING RAPID RELEASE PROPERTIES

|  |                      |
|--|----------------------|
| CERTIFICATE OF MAILING   |                      |
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA, 22313-1450 |                      |
| on <u>5-23-03</u>  | <u>Sean A. White</u> |
| Date   | Signature            |
| <u>Sean A. White</u>   |                      |
| Typed or printed name of person signing certificate  |                      |

TRANSMITTAL OF REVOCATION OF POWERS OF ATTORNEY  
AND APPOINTMENT OF NEW ATTORNEYS AND/OR AGENTS  
AND CHANGE OF CORRESPONDENCE ADDRESS

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed herewith are an executed Revocation of Powers of Attorney and Appointment of New Attorneys and/or Agents and Change of Correspondence Address with Attachment A, and a Statement under 37 C.F.R. §3.73(b) with Attachment A, for filing in the above-captioned matter.

09/888,126

-2-

Please charge any deficiency or credit any overpayment in the fees that may be due in this matter to Deposit Account No. 08-0380. A copy of this letter is enclosed for accounting purposes.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By: 

N. Scott Pierce

Registration No.: 34,900

Telephone: (978) 341-0036

Facsimile: (978) 341-0136

Concord, MA 01742-9133

Date: 5/23/03

@PFDesktop\ODMA\MIIDMA\Manager\396534;1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**CERTIFICATE OF MAILING**  
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450  
on 5-23-03 Jean A. White  
Date Signature  
Jean A. White  
Typed or printed name of person signing certificate

#8  
RECEIVED  
MAY 30 2003  
TECHNICAL CENTER 1600/2300

**REVOCATION OF POWERS OF ATTORNEY  
AND APPOINTMENT OF NEW ATTORNEYS AND/OR AGENTS  
AND CHANGE OF CORRESPONDENCE ADDRESS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Advanced Inhalation Research, Inc., a Corporation duly organized under the laws of the Delaware, is the assignee of the entire right, title and interest in the patent applications/patents identified in Attachment A. Advanced Inhalation Research, Inc. hereby appoints Carolyn S. Elmore, Registration No. 37,567 and Anne L. Craig, Registration Number 32,976, and/or agents associated with:

Elmore Craig, P.C.  
209 Main Street  
No. Chelmsford, Massachusetts 01863

to prosecute the identified applications/patents and any divisions or continuations thereof and to conduct all business in the United States Patent and Trademark Office. All previously granted Powers of Attorney are hereby revoked.

A Statement under 37 C.F.R. §3.73(b) with Attachment A is submitted herewith.

All correspondence should be sent to Elmore Craig, P.C., 209 Main Street, No. Chelmsford, Massachusetts 01863. Please direct all telephone calls to Carolyn S. Elmore, Esq. at (978) 251-3509. Please direct all facsimiles to Carolyn S. Elmore, Esq. At (978) 251-3973.

Respectfully submitted,  
Advanced Inhalation Research, Inc.

By

James M. Frates

James M. Frates

Title:

Vice President

Date

MAY 23, 2003

@PFDesktop\ODMA\MIIDMA\Manager\396534;1

ATTACHMENT A

|                   |   |                                     |
|-------------------|---|-------------------------------------|
| Applicants:       | David A. Edwards,<br>Richard P. Batycky and<br>Giovanni Caponetti | Atty. Docket No.:2685.1001-001      |
| Application No.:  | 09/337,245  | Group: 1616                         |
| Filed:            | June 22, 1999   | Examiner: Qazi, Sabiha Naim         |
| Confirmation No.: | 8746  |                                     |
| Title:            | Aggregated Porous Particles Emitted from An Inhaler (As Amended)  |                                     |
| Patent No.:       | Granted:  |                                     |
| Assignee:         | Advanced Inhalation Research, Inc.                                |                                     |
| Recordation Date: | October 29, 1999  | Reel: 010342    Frame(s): 0493-0496 |
| Applicants:       | David A. Edwards and<br>Jeffrey S. Hrkach                         | Atty. Docket No.: 2685.1003-001     |
| Application No.:  | 09/383,054  | Group: 1615                         |
| Filed:            | August 25, 1999   | Examiner: Pulliam, Amy E.           |
| Confirmation No.: | 6042  |                                     |
| Title:            | Stable Spray-Dried Protein Formulations                           |                                     |
| Patent No.:       | Granted:  |                                     |
| Assignee:         | Advanced Inhalation Research, Inc.                                |                                     |
| Recordation Date: | November 1, 1999  | Reel: 010349    Frame(s): 0126-0129 |
| Applicants:       | David A. Edwards and<br>Jeffrey S. Hrkach                         | Atty. Docket No.: 2685.1003-008     |
| Application No.:  | 09/822,716  | Group: 1615                         |
| Filed:            | March 30, 2001  | Examiner: Pulliam, Amy E.           |
| Confirmation No.: | 7248  |                                     |
| Title:            | Particles for Inhalation Having Sustained Release Properties      |                                     |
| Patent No.:       | Granted:  |                                     |
| Assignee:         | Advanced Inhalation Research, Inc.                                |                                     |
| Recordation Date: | September 24, 2001  | Reel:012190    Frame(s):0812-0815   |

|                   |  |                                  |
|-------------------|--|----------------------------------|
| Applicants:       | Richard P. Batycky,<br>Michael M. Lipp and<br>Ralph W. Niven           | Atty. Docket No.: 2685.1004-000  |
| Application No.:  | 09/382,959   | Group: 1615                      |
| Filed:            | August 25, 1999  | Examiner: Kishore, Gollamudi S   |
| Confirmation No.: | 5918   |                                  |
| Title:            | Use of Simple Amino Acids to Form Porous Particles During Spray Drying |                                  |
| Patent No.:       | Granted:   |                                  |
| Assignee:         | Advanced Inhalation Research, Inc.                                     |                                  |
| Recordation Date: | November 12, 1999  | Reel: 010378 Frame(s): 0395-0398 |
|                   |  |                                  |
| Applicants:       | Richard P. Batycky,<br>Michael M. Lipp and<br>Ralph W. Niven           | Atty. Docket No.: 2685.1004-001  |
| Application No.:  | 09/644,320   | Group:                           |
| Filed:            | August 23, 2000  | Examiner:                        |
| Confirmation No.: |  |                                  |
| Title:            | Use of Simple Amino Acids to Form Porous Particles                     |                                  |
| Patent No.:       | Granted:   |                                  |
| Assignee:         |  |                                  |
| Recordation Date: |  | Reel: Frame(s):                  |
|                   |  |                                  |
| Applicants:       | Raymond T. Bartus and<br>Dwayne F. Emerich                             | Atty. Docket No.: 2685.1009-000  |
| Application No.:  | 09/665,252   | Group: 1616                      |
| Filed:            | September 19, 2000   | Examiner: Haghighatian, Mina     |
| Confirmation No.: | 5511   |                                  |
| Title:            | Pulmonary Delivery in Treating Disorders of the Central Nervous System |                                  |
| Patent No.:       | 6,514,482  | Granted: February 4, 2003        |
| Assignee:         | Advanced Inhalation Research, Inc.                                     |                                  |
| Recordation Date: | September 19, 2000   | Reel: 011135 Frame(s): 0273-0276 |

|                   |  |                                  |
|-------------------|--|----------------------------------|
| Applicants:       | Raymond T. Bartus and<br>Dwayne F. Emerich                             | Atty. Docket No.:2685.1009-001   |
| Application No.:  | 09/877,734   | Group: 1616                      |
| Filed:            | June 8, 2001   | Examiner: Haghigatian, Mina      |
| Confirmation No.: | 9804   |                                  |
| Title:            | Pulmonary Delivery in Treating Disorders of the Central Nervous System |                                  |
| Patent No.:       |  | Granted:                         |
| Assignee:         | Advanced Inhalation Research, Inc.                                     |                                  |
| Recordation Date: | October 19, 2001   | Reel:012281 Frame(s):0310-0313   |
| Applicants:       | Raymond T. Bartus and<br>Dwayne F. Emerich                             | Atty. Docket No.: 2685.1009-009  |
| Application No.:  |  | Group:                           |
| Filed:            | May 20, 2003   | Examiner:                        |
| Confirmation No.: |  |                                  |
| Title:            | Pulmonary Delivery in Treating Disorders of the Central Nervous System |                                  |
| Patent No.:       |  | Granted:                         |
| Assignee:         | Advanced Inhalation Research, Inc.                                     |                                  |
| Recordation Date: | October 19, 2001   | Reel:012281 Frame(s):0310-0313   |
| Applicants:       | Michael M. Lipp, Richard<br>P. Batycky and Giovanni<br>Caponetti       | Atty. Docket No.: 2685.1010-001  |
| Application No.:  | 09/644,105   | Group: 1615                      |
| Filed:            | August 23, 2000  | Examiner: Kishore, Gollamudi S   |
| Confirmation No.: | 1521   |                                  |
| Title:            | Formulation For Spray-Drying Large Porous Particles                    |                                  |
| Patent No.:       |  | Granted:                         |
| Assignee:         | Advanced Inhalation Research, Inc.                                     |                                  |
| Recordation Date: | November 22, 2000  | Reel: 011321 Frame(s): 0557-0560 |

|                   |   |                                     |
|-------------------|---|-------------------------------------|
| Applicants:       | Sujit K. Basu, Jeffrey S. Hrkach, Giovanni Caponetti, Michael M. Lipp, Katharina Elbert and Wen-I Li            | Atty. Docket No.: 2685.1012-001     |
| Application No.:  | 09/644,736  | Group: 1615                         |
| Filed:            | August 23, 2000   | Examiner: Kishore, Gollamudi S      |
| Confirmation No.: | 1625  |                                     |
| Title:            | Modulation of Release From Dry Powder Formulations  |                                     |
| Patent No.:       | Granted:  |                                     |
| Assignee:         | Advanced Inhalation Research, Inc.  |                                     |
| Recordation Date: | October 25, 2000  | Reel: 011191    Frame(s): 0854-0859 |
|                   |   |                                     |
| Applicants:       | Sujit K. Basu, Giovanni Caponetti, Daniel R. Deaver, Katharina J. Elbert, Jeffrey S. Hrkach and Michael M. Lipp | Atty. Docket No.: 2685.1012-004     |
| Application No.:  | 09/792,869  | Group: 1615                         |
| Filed:            | February 23, 2001   | Examiner: Kishore, Gollamudi S      |
| Confirmation No.: | 9276  |                                     |
| Title:            | Modulation of Release From Dry Powder Formulations  |                                     |
| Patent No.:       | Granted:  |                                     |
| Assignee:         | Advanced Inhalation Research, Inc.  |                                     |
| Recordation Date: | May 8, 2001   | Reel: 011794    Frame(s):0296-0301  |

|                   |   |                                      |
|-------------------|---|--------------------------------------|
| Applicants:       | Sujit K. Basu, Jeffrey S. Hrkach, Giovanni Caponetti, Michael M. Lipp, Katharina Elbert, and Wen-I Li           | Atty. Docket No.: 2685.1012-011      |
| Application No.:  | 10/425,193  | Group:                               |
| Filed:            | April 28, 2003  | Examiner:                            |
| Confirmation No.: |   |                                      |
| Title:            | Modulation of Release From Dry Powder Formulations  |                                      |
| Patent No.:       | Granted:  |                                      |
| Assignee:         | Advanced Inhalation Research, Inc.  |                                      |
| Recordation Date: | October 25, 2000  | Reel:011191      Frame(s): 0854-0859 |
|                   |   |                                      |
| Applicants:       | Sujit K. Basu, Giovanni Caponetti, Daniel R. Deaver, Katharina J. Elbert, Jeffrey S. Hrkach and Michael M. Lipp | Atty. Docket No.: 2685.1012-012      |
| Application No.:  | 10/425,194  | Group:                               |
| Filed:            | April 28, 2003  | Examiner:                            |
| Confirmation No.: |   |                                      |
| Title:            | Modulation of Release From Dry Powder Formulations  |                                      |
| Patent No.:       | Granted:  |                                      |
| Assignee:         | Advanced Inhalation Research, Inc.  |                                      |
| Recordation Date: | May 8, 2001   | Reel: 011794      Frame(s):0296-0301 |




|                   |  |                                      |
|-------------------|--|--------------------------------------|
| Applicants:       | David A. Edwards,<br>Richard P. Batycky and<br>Lloyd Johnston              | Atty. Docket No.: 2685.2001-000      |
| Application No.:  | 09/591,307   | Group: 1616                          |
| Filed:            | June 9, 2000   | Examiner: Haghighatian, Mina         |
| Confirmation No.: | 2060   |                                      |
| Title:            | Highly Efficient Delivery of a Large Therapeutic Mass Aerosol (As Amended) |                                      |
| Patent No.:       | Granted:   |                                      |
| Assignee:         | Advanced Inhalation Research, Inc.   |                                      |
| Recordation Date: | August 29, 2000  | Reel:011074      Frame(s):0991-0994  |
|                   |  |                                      |
| Applicants:       | David A. Edwards,<br>Richard P. Batycky and<br>Lloyd Johnston              | Atty. Docket No.: 2685.2001-003      |
| Application No.:  | 09/878,146   | Group: 1616                          |
| Filed:            | June 8, 2001   | Examiner: Haghighatian, Mina         |
| Confirmation No.: | 1303   |                                      |
| Title:            | Highly Efficient Delivery of a Large Therapeutic Mass Aerosol              |                                      |
| Patent No.:       | Granted:   |                                      |
| Assignee:         | Advanced Inhalation Research, Inc.   |                                      |
| Recordation Date: | October 5, 2001  | Reel: 012234      Frame(s):0035-0038 |

|                   |  |                                 |
|-------------------|--|---------------------------------|
| Applicants:       | David A. Edwards,<br>Richard P. Batycky,<br>Jennifer L. Schmitke,<br>Nicolas Tsapis, David A.<br>Weitz, and Jeffrey S.<br>Hrkach | Atty. Docket No.:2685.2006-002  |
| Application No.:  | 10/300,070   | Group: 1614                     |
| Filed:            | November 20, 2002  | Examiner:                       |
| Confirmation No.: | 5990   |                                 |
| Title:            | Compositions for Sustained Action Product Delivery and Methods of Use Thereof  |                                 |
| Patent No.:       | Granted:   |                                 |
| Assignee:         | 1. Advanced Inhalation Research, Inc.<br>2. President and Fellows of Harvard College   |                                 |
| Recordation Date: | Reel:  | Frame(s):                       |
|                   |  |                                 |
| Applicants:       | Richard P. Batycky,<br>David A. Edwards and<br>Michael M. Lipp   | Atty. Docket No.: 2685.2009-001 |
| Application No.:  | 10/300,657   | Group: 1615                     |
| Filed:            | November 20, 2002  | Examiner:                       |
| Confirmation No.: | 6792   |                                 |
| Title:            | Improved Particulate Compositions for Pulmonary Delivery   |                                 |
| Patent No.:       | Granted:   |                                 |
| Assignee:         | Advanced Inhalation Research, Inc.   |                                 |
| Recordation Date: | Reel:  | Frame(s):                       |

|                   |  |                                  |
|-------------------|--|----------------------------------|
| Applicants:       | Sujit K. Basu, Jeffrey Hrkach, Michael Lipp, Katharina Elbert and David A. Edwards | Atty. Docket No.: 2685.2012-000  |
| Application No.:  | 09/752,109   | Group: 1616                      |
| Filed:            | December 29, 2000  | Examiner: Haghighatian, Mina     |
| Confirmation No.: | 8225   |                                  |
| Title:            | Particles for Inhalation Having Sustained Release Properties                       |                                  |
| Patent No.:       | Granted:   |                                  |
| Assignee:         | Advanced Inhalation Research, Inc.   |                                  |
| Recordation Date: | April 9, 2001  | Reel:011695 Frame(s): 0075-0079  |
|                   |  |                                  |
| Applicants:       | Sujit K. Basu, Jeffrey Hrkach, Michael Lipp, Katharina Elbert and David A. Edwards | Atty. Docket No.: 2685.2012-003  |
| Application No.:  | 10/202,616   | Group: 1616                      |
| Filed:            | July 23, 2002  | Examiner: Haghighatian, Mina     |
| Confirmation No.: | 5026   |                                  |
| Title:            | Particles for Inhalation Having Sustained Release Properties                       |                                  |
| Patent No.:       | Granted:   |                                  |
| Assignee:         | Advanced Inhalation Research, Inc.   |                                  |
| Recordation Date: | April 9, 2001  | Reel: 011695 Frame(s): 0075-0079 |

|                   |  |  |
|-------------------|--|--|
| Applicants:       | Richard P. Batycky,<br>George Grandolfi, Sean<br>Plunkett, Michael M. Lipp<br>and James Wright | Atty. Docket No.: 2685.2014-001                            |
| Application No.:  | 10/300,726   | Group: 1615  |
| Filed:            | November 20, 2002  | Examiner:  |
| Confirmation No.: | 7267   |  |
| Title:            | Particulate Compositions for Improving Solubility of Poorly Soluble Agents                     |  |
| Patent No.:       | Granted:   |  |
| Assignee:         | Advanced Inhalation Research, Inc.   |  |
| Recordation Date: | Reel:  | Frame(s):  |
|                   |  |  |
| Applicants:       | Donghao Chen, Richard<br>P. Batycky, Lloyd<br>Johnston and Jeffrey<br>Mintzes                  | Atty. Docket No.: 2685.2016-000                            |
| Application No.:  | 09/837,620   | Group: 1616  |
| Filed:            | April 18, 2001   | Examiner: Gollamudi, Sharmila S                            |
| Confirmation No.: | 8051   |  |
| Title:            | Control of Process Humidity to Produce Large, Porous Particles                                 |  |
| Patent No.:       | Granted:   |  |
| Assignee:         | 1. Advanced Inhalation Research Inc.<br>2. Penn State Research Foundation                      |  |
| Recordation Date: | 1. August 13, 2001<br>2. August 13, 2001   | Reel: 012085    Frame(s): 0894-0897<br>012085    0857-0859 |

|                   |   |                                     |
|-------------------|---|-------------------------------------|
| Applicants:       | Jennifer L. Schmitke,<br>Donghao Chen, Richard<br>P. Batycky, David A.<br>Edwards, and Jeffrey S.<br>Hrkach | Atty. Docket No.: 2685.2030-000     |
| Application No.:  | 09/888,126                 | Group: 1616                         |
| Filed:            | June 22, 2001   | Examiner: Haghighatian, Mina        |
| Confirmation No.: | 9053  |                                     |
| Title:            | Particles for Inhalation Having Rapid Release Properties  |                                     |
| Patent No.:       | Granted:  |                                     |
| Assignee:         | Advanced Inhalation Research, Inc.  |                                     |
| Recordation Date: | January 22, 2002  | Reel: 012544    Frame(s): 0581-0586 |
|                   |   |                                     |
| Applicants:       | Jennifer L. Schmitke,<br>Donghao Chen, Richard<br>P. Batycky, David A.<br>Edwards, and Jeffrey S.<br>Hrkach | Atty. Docket No.: 2685.2030-001     |
| Application No.:  | 10/179,463  | Group: 1616                         |
| Filed:            | June 24, 2002   | Examiner: Haghighatian, Mina        |
| Confirmation No.: | 3216  |                                     |
| Title:            | Particles for Inhalation Having Rapid Release Properties  |                                     |
| Patent No.:       | Granted:  |                                     |
| Assignee:         |   |                                     |
| Recordation Date: | Reel:   | Frame(s):                           |

|                   |   |                                 |
|-------------------|---|---------------------------------|
| Applicants:       | Sujit K. Basu, Katharina Elbert, Jeffrey Hrkach and Giovanni Caponetti  | Atty. Docket No.: 2685.2032-001 |
| Application No.:  | 60/427,845  | Group:                          |
| Filed:            | November 20, 2002   | Examiner:                       |
| Confirmation No.: |   |                                 |
| Title:            | Inhalable Formulations for Sustained Release  |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         | Advanced Inhalation Research, Inc.  |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |
|                   |   |                                 |
| Applicants:       | Richard P. Batycky, Giovanni Caponetti, Mariko Childs, Elliot Ehrich, Karen Fu, Jeffrey S. Hrkach, Wen-I Li, Michael M. Lipp, Mei-Ling Pan, and Jason Summa | Atty. Docket No.: 2685.2046-000 |
| Application No.:  | 60/393,007  | Group:                          |
| Filed:            | June 28, 2002   | Examiner:                       |
| Confirmation No.: | 6936  |                                 |
| Title:            | Inhalable Epinephrine   |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         | Advanced Inhalation Research, Inc. (copy included)  |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |

|                   |   |                                 |
|-------------------|---|---------------------------------|
| Applicants:       | Richard P. Batycky,<br>Giovanni Caponetti,<br>Mariko Childs, Elliot<br>Ehrich, Karen Fu, Jeffrey<br>S. Hrkach, Wen-I Li,<br>Michael M. Lipp, Mei-<br>Ling Pan, and Jason<br>Summa | Atty. Docket No.: 2685.2046-001 |
| Application No.:  | 60/393,716  | Group:                          |
| Filed:            | July 2, 2002  | Examiner:                       |
| Confirmation No.: | 9158  |                                 |
| Title:            | Inhalable Epinephrine   |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         | Advanced Inhalation Research, Inc. (copy included)  |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |
|                   |   |                                 |
| Applicants:       | Richard P. Batycky,<br>Giovanni Caponetti,<br>Mariko Childs, Elliot<br>Ehrich, Karen Fu, Jeffrey<br>S. Hrkach, Wen-I Li,<br>Michael M. Lipp, Mei-<br>Ling Pan, and Jason<br>Summa | Atty. Docket No.: 2685.2046-002 |
| Application No.:  | 60/425,349  | Group:                          |
| Filed:            | November 8, 2002  | Examiner:                       |
| Confirmation No.: | 2685  |                                 |
| Title:            | Inhalable Epinephrine   |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         | Advanced Inhalation Research, Inc. (copy included)  |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |

|                   |   |                                 |
|-------------------|---|---------------------------------|
| Applicants:       | Blair Jackson, David J. Bennett, Raymond T. Bartus and Dwaine F. Emerich  | Atty. Docket No.: 2685.2044-001 |
| Application No.:  | 10/392,342  | Group:                          |
| Filed:            | March 19, 2003  | Examiner:                       |
| Confirmation No.: | 7537  |                                 |
| Title:            | Pulmonary Delivery for Levodopa   |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         |   |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |
|                   |   |                                 |
| Applicants:       | Sujit K. Basu, Katharina Elbert, Jeffrey Hrkach and Giovanni Caponetti    | Atty. Docket No.: 2685.2032-002 |
| Application No.:  | 10/371,398  | Group:                          |
| Filed:            | February 20, 2003   | Examiner:                       |
| Confirmation No.: | 8445  |                                 |
| Title:            | Inhalable Formulations for Sustained Release                              |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         |   |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |
|                   |   |                                 |
| Applicants:       | Sujit K. Basu, Giovanni Caponetti, Robert Clarke, and Katharina J. Elbert | Atty. Docket No.: 2685.2034-001 |
| Application No.:  | 10/392,333  | Group:                          |
| Filed:            | March 19, 2003  | Examiner:                       |
| Confirmation No.: | 7528  |                                 |
| Title:            | Inhalable Sustained Therapeutic Formulations                              |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         |   |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |



|                   |   |                                 |
|-------------------|---|---------------------------------|
| Applicants:       | Blair Jackson, Lloyd<br>Johnston, Charles D.<br>Blizzard and Jeffrey<br>Mintzes | Atty. Docket No.: 2685.2040-001 |
| Application No.:  | 10/394,401  | Group:                          |
| Filed:            | March 19, 2003  | Examiner:                       |
| Confirmation No.: |   |                                 |
| Title:            | hGH (Human Growth Hormone) Formulations for Pulmonary<br>Administration         |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         |   |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |



STATEMENT UNDER 37 C.F.R. § 3.73(b)

Advanced Inhalation Research, Inc.  
(Name of Assignee)

corporation  
(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is

- A. ☒ the assignee of the entire right, title and interest in the patent application(s)/patent(s) identified in the attached Attachment A; or
- B. ☐ an assignee together with ☐ of the entire right, title and interest in the patent application identified above.

The right, title and interest of the above-named assignee in the patent application identified above is established by virtue of:

- A. ☒ An assignment from the inventor(s) of the patent application(s)/patents identified in Attachment A. The assignment was recorded in the Patent and Trademark Office at the Reel(s) and Frame(s) indicated in Attachment A, or a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From: To:  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
2. From: To:  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
3. From: To:  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

- ☐ Additional documents in the chain of title are listed on a supplemental sheet.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Date: 22-MAY-2003

Name: James M. Frates

Title: Vice President

Signature: James M. Frates

ATTACHMENT A

|                   |   |                                     |
|-------------------|---|-------------------------------------|
| Applicants:       | David A. Edwards,<br>Richard P. Batycky and<br>Giovanni Caponetti | Atty. Docket No.:2685.1001-001      |
| Application No.:  | 09/337,245  | Group: 1616                         |
| Filed:            | June 22, 1999   | Examiner: Qazi, Sabiha Naim         |
| Confirmation No.: | 8746  |                                     |
| Title:            | Aggregated Porous Particles Emitted from An Inhaler (As Amended)  |                                     |
| Patent No.:       | Granted:  |                                     |
| Assignee:         | Advanced Inhalation Research, Inc.                                |                                     |
| Recordation Date: | October 29, 1999  | Reel: 010342    Frame(s): 0493-0496 |
| Applicants:       | David A. Edwards and<br>Jeffrey S. Hrkach                         | Atty. Docket No.: 2685.1003-001     |
| Application No.:  | 09/383,054  | Group: 1615                         |
| Filed:            | August 25, 1999   | Examiner: Pulliam, Amy E.           |
| Confirmation No.: | 6042  |                                     |
| Title:            | Stable Spray-Dried Protein Formulations                           |                                     |
| Patent No.:       | Granted:  |                                     |
| Assignee:         | Advanced Inhalation Research, Inc.                                |                                     |
| Recordation Date: | November 1, 1999  | Reel: 010349    Frame(s): 0126-0129 |
| Applicants:       | David A. Edwards and<br>Jeffrey S. Hrkach                         | Atty. Docket No.: 2685.1003-008     |
| Application No.:  | 09/822,716  | Group: 1615                         |
| Filed:            | March 30, 2001  | Examiner: Pulliam, Amy E.           |
| Confirmation No.: | 7248  |                                     |
| Title:            | Particles for Inhalation Having Sustained Release Properties      |                                     |
| Patent No.:       | Granted:  |                                     |
| Assignee:         | Advanced Inhalation Research, Inc.                                |                                     |
| Recordation Date: | September 24, 2001  | Reel:012190    Frame(s):0812-0815   |

|                   |  |                                     |
|-------------------|--|-------------------------------------|
| Applicants:       | Richard P. Batycky,<br>Michael M. Lipp and<br>Ralph W. Niven           | Atty. Docket No.: 2685.1004-000     |
| Application No.:  | 09/382,959   | Group: 1615                         |
| Filed:            | August 25, 1999  | Examiner: Kishore, Gollamudi S      |
| Confirmation No.: | 5918   |                                     |
| Title:            | Use of Simple Amino Acids to Form Porous Particles During Spray Drying |                                     |
| Patent No.:       | Granted:   |                                     |
| Assignee:         | Advanced Inhalation Research, Inc.                                     |                                     |
| Recordation Date: | November 12, 1999  | Reel: 010378    Frame(s): 0395-0398 |
|                   |  |                                     |
| Applicants:       | Richard P. Batycky,<br>Michael M. Lipp and<br>Ralph W. Niven           | Atty. Docket No.: 2685.1004-001     |
| Application No.:  | 09/644,320   | Group:                              |
| Filed:            | August 23, 2000  | Examiner:                           |
| Confirmation No.: |  |                                     |
| Title:            | Use of Simple Amino Acids to Form Porous Particles                     |                                     |
| Patent No.:       | Granted:   |                                     |
| Assignee:         |  |                                     |
| Recordation Date: |  | Reel:    Frame(s):                  |
|                   |  |                                     |
| Applicants:       | Raymond T. Bartus and<br>Dwayne F. Emerich                             | Atty. Docket No.: 2685.1009-000     |
| Application No.:  | 09/665,252   | Group: 1616                         |
| Filed:            | September 19, 2000   | Examiner: Haghighatian, Mina        |
| Confirmation No.: | 5511   |                                     |
| Title:            | Pulmonary Delivery in Treating Disorders of the Central Nervous System |                                     |
| Patent No.:       | 6,514,482  | Granted: February 4, 2003           |
| Assignee:         | Advanced Inhalation Research, Inc.                                     |                                     |
| Recordation Date: | September 19, 2000   | Reel: 011135    Frame(s): 0273-0276 |

|                   |  |                                  |
|-------------------|--|----------------------------------|
| Applicants:       | Raymond T. Bartus and<br>Dwayne F. Emerich                             | Atty. Docket No.:2685.1009-001   |
| Application No.:  | 09/877,734   | Group: 1616                      |
| Filed:            | June 8, 2001   | Examiner: Haghighatian, Mina     |
| Confirmation No.: | 9804   |                                  |
| Title:            | Pulmonary Delivery in Treating Disorders of the Central Nervous System |                                  |
| Patent No.:       |  | Granted:                         |
| Assignee:         | Advanced Inhalation Research, Inc.                                     |                                  |
| Recordation Date: | October 19, 2001   | Reel:012281 Frame(s):0310-0313   |
| Applicants:       | Raymond T. Bartus and<br>Dwayne F. Emerich                             | Atty. Docket No.: 2685.1009-009  |
| Application No.:  |  | Group:                           |
| Filed:            | May 20, 2003   | Examiner:                        |
| Confirmation No.: |  |                                  |
| Title:            | Pulmonary Delivery in Treating Disorders of the Central Nervous System |                                  |
| Patent No.:       |  | Granted:                         |
| Assignee:         | Advanced Inhalation Research, Inc.                                     |                                  |
| Recordation Date: | October 19, 2001   | Reel:012281 Frame(s):0310-0313   |
| Applicants:       | Michael M. Lipp, Richard<br>P. Batycky and Giovanni<br>Caponetti       | Atty. Docket No.: 2685.1010-001  |
| Application No.:  | 09/644,105   | Group: 1615                      |
| Filed:            | August 23, 2000  | Examiner: Kishore, Gollamudi S   |
| Confirmation No.: | 1521   |                                  |
| Title:            | Formulation For Spray-Drying Large Porous Particles                    |                                  |
| Patent No.:       |  | Granted:                         |
| Assignee:         | Advanced Inhalation Research, Inc.                                     |                                  |
| Recordation Date: | November 22, 2000  | Reel: 011321 Frame(s): 0557-0560 |

|                   |   |                                  |
|-------------------|---|----------------------------------|
| Applicants:       | Sujit K. Basu, Jeffrey S. Hrkach, Giovanni Caponetti, Michael M. Lipp, Katharina Elbert and Wen-I Li            | Atty. Docket No.: 2685.1012-001  |
| Application No.:  | 09/644,736  | Group: 1615                      |
| Filed:            | August 23, 2000   | Examiner: Kishore, Gollamudi S   |
| Confirmation No.: | 1625  |                                  |
| Title:            | Modulation of Release From Dry Powder Formulations  |                                  |
| Patent No.:       | Granted:  |                                  |
| Assignee:         | Advanced Inhalation Research, Inc.  |                                  |
| Recordation Date: | October 25, 2000  | Reel: 011191 Frame(s): 0854-0859 |
|                   |   |                                  |
| Applicants:       | Sujit K. Basu, Giovanni Caponetti, Daniel R. Deaver, Katharina J. Elbert, Jeffrey S. Hrkach and Michael M. Lipp | Atty. Docket No.: 2685.1012-004  |
| Application No.:  | 09/792,869  | Group: 1615                      |
| Filed:            | February 23, 2001   | Examiner: Kishore, Gollamudi S   |
| Confirmation No.: | 9276  |                                  |
| Title:            | Modulation of Release From Dry Powder Formulations  |                                  |
| Patent No.:       | Granted:  |                                  |
| Assignee:         | Advanced Inhalation Research, Inc.  |                                  |
| Recordation Date: | May 8, 2001   | Reel: 011794 Frame(s):0296-0301  |

|                   |   |                                      |
|-------------------|---|--------------------------------------|
| Applicants:       | Sujit K. Basu, Jeffrey S. Hrkach, Giovanni Caponetti, Michael M. Lipp, Katharina Elbert, and Wen-I Li           | Atty. Docket No.: 2685.1012-011      |
| Application No.:  | 10/425,193  | Group:                               |
| Filed:            | April 28, 2003  | Examiner:                            |
| Confirmation No.: |   |                                      |
| Title:            | Modulation of Release From Dry Powder Formulations  |                                      |
| Patent No.:       | Granted:  |                                      |
| Assignee:         | Advanced Inhalation Research, Inc.  |                                      |
| Recordation Date: | October 25, 2000  | Reel:011191      Frame(s): 0854-0859 |
|                   |   |                                      |
| Applicants:       | Sujit K. Basu, Giovanni Caponetti, Daniel R. Deaver, Katharina J. Elbert, Jeffrey S. Hrkach and Michael M. Lipp | Atty. Docket No.: 2685.1012-012      |
| Application No.:  | 10/425,194  | Group:                               |
| Filed:            | April 28, 2003  | Examiner:                            |
| Confirmation No.: |   |                                      |
| Title:            | Modulation of Release From Dry Powder Formulations  |                                      |
| Patent No.:       | Granted:  |                                      |
| Assignee:         | Advanced Inhalation Research, Inc.  |                                      |
| Recordation Date: | May 8, 2001   | Reel: 011794      Frame(s):0296-0301 |

|                   |  |                                    |
|-------------------|--|------------------------------------|
| Applicants:       | David A. Edwards,<br>Richard P. Batycky and<br>Lloyd Johnston              | Atty. Docket No.: 2685.2001-000    |
| Application No.:  | 09/591,307   | Group: 1616                        |
| Filed:            | June 9, 2000   | Examiner: Haghighatian, Mina       |
| Confirmation No.: | 2060   |                                    |
| Title:            | Highly Efficient Delivery of a Large Therapeutic Mass Aerosol (As Amended) |                                    |
| Patent No.:       | Granted:   |                                    |
| Assignee:         | Advanced Inhalation Research, Inc.   |                                    |
| Recordation Date: | August 29, 2000  | Reel:011074    Frame(s):0991-0994  |
|                   |  |                                    |
| Applicants:       | David A. Edwards,<br>Richard P. Batycky and<br>Lloyd Johnston              | Atty. Docket No.: 2685.2001-003    |
| Application No.:  | 09/878,146   | Group: 1616                        |
| Filed:            | June 8, 2001   | Examiner: Haghighatian, Mina       |
| Confirmation No.: | 1303   |                                    |
| Title:            | Highly Efficient Delivery of a Large Therapeutic Mass Aerosol              |                                    |
| Patent No.:       | Granted:   |                                    |
| Assignee:         | Advanced Inhalation Research, Inc.   |                                    |
| Recordation Date: | October 5, 2001  | Reel: 012234    Frame(s):0035-0038 |



|                   |  |                                 |
|-------------------|--|---------------------------------|
| Applicants:       | David A. Edwards,<br>Richard P. Batycky,<br>Jennifer L. Schmitke,<br>Nicolas Tsapis, David A.<br>Weitz, and Jeffrey S.<br>Hrkach | Atty. Docket No.:2685.2006-002  |
| Application No.:  | 10/300,070   | Group: 1614                     |
| Filed:            | November 20, 2002  | Examiner:                       |
| Confirmation No.: | 5990   |                                 |
| Title:            | Compositions for Sustained Action Product Delivery and Methods of Use Thereof  |                                 |
| Patent No.:       | Granted:   |                                 |
| Assignee:         | 1. Advanced Inhalation Research, Inc.<br>2. President and Fellows of Harvard College   |                                 |
| Recordation Date: | Reel:  | Frame(s):                       |
|                   |  |                                 |
| Applicants:       | Richard P. Batycky,<br>David A. Edwards and<br>Michael M. Lipp   | Atty. Docket No.: 2685.2009-001 |
| Application No.:  | 10/300,657   | Group: 1615                     |
| Filed:            | November 20, 2002  | Examiner:                       |
| Confirmation No.: | 6792   |                                 |
| Title:            | Improved Particulate Compositions for Pulmonary Delivery   |                                 |
| Patent No.:       | Granted:   |                                 |
| Assignee:         | Advanced Inhalation Research, Inc.   |                                 |
| Recordation Date: | Reel:  | Frame(s):                       |

|                   |  |                                  |
|-------------------|--|----------------------------------|
| Applicants:       | Sujit K. Basu, Jeffrey Hrkach, Michael Lipp, Katharina Elbert and David A. Edwards | Atty. Docket No.: 2685.2012-000  |
| Application No.:  | 09/752,109   | Group: 1616                      |
| Filed:            | December 29, 2000  | Examiner: Haghighatian, Mina     |
| Confirmation No.: | 8225   |                                  |
| Title:            | Particles for Inhalation Having Sustained Release Properties                       |                                  |
| Patent No.:       | Granted:   |                                  |
| Assignee:         | Advanced Inhalation Research, Inc.   |                                  |
| Recordation Date: | April 9, 2001  | Reel:011695 Frame(s): 0075-0079  |
|                   |  |                                  |
| Applicants:       | Sujit K. Basu, Jeffrey Hrkach, Michael Lipp, Katharina Elbert and David A. Edwards | Atty. Docket No.: 2685.2012-003  |
| Application No.:  | 10/202,616   | Group: 1616                      |
| Filed:            | July 23, 2002  | Examiner: Haghighatian, Mina     |
| Confirmation No.: | 5026   |                                  |
| Title:            | Particles for Inhalation Having Sustained Release Properties                       |                                  |
| Patent No.:       | Granted:   |                                  |
| Assignee:         | Advanced Inhalation Research, Inc.   |                                  |
| Recordation Date: | April 9, 2001  | Reel: 011695 Frame(s): 0075-0079 |

|                   |  |  |
|-------------------|--|--|
| Applicants:       | Richard P. Batycky,<br>George Grandolfi, Sean<br>Plunkett, Michael M. Lipp<br>and James Wright | Atty. Docket No.: 2685.2014-001                      |
| Application No.:  | 10/300,726   | Group: 1615  |
| Filed:            | November 20, 2002  | Examiner:  |
| Confirmation No.: | 7267   |  |
| Title:            | Particulate Compositions for Improving Solubility of Poorly Soluble Agents                     |  |
| Patent No.:       | Granted:   |  |
| Assignee:         | Advanced Inhalation Research, Inc.   |  |
| Recordation Date: | Reel:  | Frame(s):  |
|                   |  |  |
| Applicants:       | Donghao Chen, Richard<br>P. Batycky, Lloyd<br>Johnston and Jeffrey<br>Mintzes                  | Atty. Docket No.: 2685.2016-000                      |
| Application No.:  | 09/837,620   | Group: 1616  |
| Filed:            | April 18, 2001   | Examiner: Gollamudi, Sharmila S                      |
| Confirmation No.: | 8051   |  |
| Title:            | Control of Process Humidity to Produce Large, Porous Particles                                 |  |
| Patent No.:       | Granted:   |  |
| Assignee:         | 1. Advanced Inhalation Research Inc.<br>2. Penn State Research Foundation                      |  |
| Recordation Date: | 1. August 13, 2001<br>2. August 13, 2001   | Reel: 012085 012085<br>Frame(s): 0894-0897 0857-0859 |

|                   |   |                                     |
|-------------------|---|-------------------------------------|
| Applicants:       | Jennifer L. Schmitke,<br>Donghao Chen, Richard<br>P. Batycky, David A.<br>Edwards, and Jeffrey S.<br>Hrkach | Atty. Docket No.: 2685.2030-000     |
| Application No.:  | 09/888,126  | Group: 1616                         |
| Filed:            | June 22, 2001   | Examiner: Haghighatian, Mina        |
| Confirmation No.: | 9053  |                                     |
| Title:            | Particles for Inhalation Having Rapid Release Properties  |                                     |
| Patent No.:       | Granted:  |                                     |
| Assignee:         | Advanced Inhalation Research, Inc.  |                                     |
| Recordation Date: | January 22, 2002  | Reel: 012544    Frame(s): 0581-0586 |
|                   |   |                                     |
| Applicants:       | Jennifer L. Schmitke,<br>Donghao Chen, Richard<br>P. Batycky, David A.<br>Edwards, and Jeffrey S.<br>Hrkach | Atty. Docket No.: 2685.2030-001     |
| Application No.:  | 10/179,463  | Group: 1616                         |
| Filed:            | June 24, 2002   | Examiner: Haghighatian, Mina        |
| Confirmation No.: | 3216  |                                     |
| Title:            | Particles for Inhalation Having Rapid Release Properties  |                                     |
| Patent No.:       | Granted:  |                                     |
| Assignee:         |   |                                     |
| Recordation Date: |   | Reel:            Frame(s):          |

|                   |   |                                 |
|-------------------|---|---------------------------------|
| Applicants:       | Sujit K. Basu, Katharina Elbert, Jeffrey Hrkach and Giovanni Caponetti  | Atty. Docket No.: 2685.2032-001 |
| Application No.:  | 60/427,845  | Group:                          |
| Filed:            | November 20, 2002   | Examiner:                       |
| Confirmation No.: |   |                                 |
| Title:            | Inhalable Formulations for Sustained Release  |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         | Advanced Inhalation Research, Inc.  |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |
|                   |   |                                 |
| Applicants:       | Richard P. Batycky, Giovanni Caponetti, Mariko Childs, Elliot Ehrich, Karen Fu, Jeffrey S. Hrkach, Wen-I Li, Michael M. Lipp, Mei-Ling Pan, and Jason Summa | Atty. Docket No.: 2685.2046-000 |
| Application No.:  | 60/393,007  | Group:                          |
| Filed:            | June 28, 2002   | Examiner:                       |
| Confirmation No.: | 6936  |                                 |
| Title:            | Inhalable Epinephrine   |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         | Advanced Inhalation Research, Inc. (copy included)  |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |

|                   |   |                                 |
|-------------------|---|---------------------------------|
| Applicants:       | Richard P. Batycky,<br>Giovanni Caponetti,<br>Mariko Childs, Elliot<br>Ehrich, Karen Fu, Jeffrey<br>S. Hrkach, Wen-I Li,<br>Michael M. Lipp, Mei-<br>Ling Pan, and Jason<br>Summa | Atty. Docket No.: 2685.2046-001 |
| Application No.:  | 60/393,716  | Group:                          |
| Filed:            | July 2, 2002  | Examiner:                       |
| Confirmation No.: | 9158  |                                 |
| Title:            | Inhalable Epinephrine   |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         | Advanced Inhalation Research, Inc. (copy included)  |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |
|                   |   |                                 |
| Applicants:       | Richard P. Batycky,<br>Giovanni Caponetti,<br>Mariko Childs, Elliot<br>Ehrich, Karen Fu, Jeffrey<br>S. Hrkach, Wen-I Li,<br>Michael M. Lipp, Mei-<br>Ling Pan, and Jason<br>Summa | Atty. Docket No.: 2685.2046-002 |
| Application No.:  | 60/425,349  | Group:                          |
| Filed:            | November 8, 2002  | Examiner:                       |
| Confirmation No.: | 2685  |                                 |
| Title:            | Inhalable Epinephrine   |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         | Advanced Inhalation Research, Inc. (copy included)  |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |

|                   |   |                                 |
|-------------------|---|---------------------------------|
| Applicants:       | Blair Jackson, David J. Bennett, Raymond T. Bartus and Dwaine F. Emerich  | Atty. Docket No.: 2685.2044-001 |
| Application No.:  | 10/392,342  | Group:                          |
| Filed:            | March 19, 2003  | Examiner:                       |
| Confirmation No.: | 7537  |                                 |
| Title:            | Pulmonary Delivery for Levodopa   |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         |   |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |
|                   |   |                                 |
| Applicants:       | Sujit K. Basu, Katharina Elbert, Jeffrey Hrkach and Giovanni Caponetti    | Atty. Docket No.: 2685.2032-002 |
| Application No.:  | 10/371,398  | Group:                          |
| Filed:            | February 20, 2003   | Examiner:                       |
| Confirmation No.: | 8445  |                                 |
| Title:            | Inhalable Formulations for Sustained Release                              |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         |   |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |
|                   |   |                                 |
| Applicants:       | Sujit K. Basu, Giovanni Caponetti, Robert Clarke, and Katharina J. Elbert | Atty. Docket No.: 2685.2034-001 |
| Application No.:  | 10/392,333  | Group:                          |
| Filed:            | March 19, 2003  | Examiner:                       |
| Confirmation No.: | 7528  |                                 |
| Title:            | Inhalable Sustained Therapeutic Formulations                              |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         |   |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |

|                   |   |                                 |
|-------------------|---|---------------------------------|
| Applicants:       | Blair Jackson, Lloyd<br>Johnston, Charles D.<br>Blizzard and Jeffrey<br>Mintzes | Atty. Docket No.: 2685.2040-001 |
| Application No.:  | 10/394,401  | Group:                          |
| Filed:            | March 19, 2003  | Examiner:                       |
| Confirmation No.: |   |                                 |
| Title:            | hGH (Human Growth Hormone) Formulations for Pulmonary<br>Administration         |                                 |
| Patent No.:       | Granted:  |                                 |
| Assignee:         |   |                                 |
| Recordation Date: | Reel:   | Frame(s):                       |